January 11, 1980

TO: Al Secor
              Jeff Rochlis
              Ed Krakauer

FROM: Dave Chandler

SUBJECT: PARTICIPATION IN PRESTEL INTERNATIONAL MARKET TRIAL

As is indicated in the attached documents, Mattel has been invited to participate in a market trial of the Prestel International sponsored by the British Post Office and administered by Logica. This is a rather limited trial, with some ten companies supplying data and some twenty companies as users of that data. We have also been invited to attend the first forum of the participants, provided we express our intent to become participants in the program.

The costs associated with participating in the one year long trial are tabulated below. These numbers assume that by the time we would have a terminal installed the Prestel International Operation would have United States switching network in place, which they expect to have by the end of this month. You will note that the largest cost element has to do with the usage that we make of the terminal which could vary either direction, depending on how significant we may find that portion of the operation.

It is my recommendation that we sign and send the letter of intent to participate with the intention of having one terminal installed here at Hawthorne. A single terminal is acceptable to them, even though in their letter they suggest two - one here, and perhaps one in England. It would be possible, if we should elect to do so, to have a terminal installed at Dixon's or perhaps some other place in England, and among other things, use it for transmission of business information. Assuming we proceed with this I would propose to attend this first forum in London, which meets the 22nd and 23rd of this month. The advantages of participating are several. We would get the opportunity to be involved in early discussions and be aware of the direction that Viewdata is going on an international basis. We would also have a functioning operation with which we could be learning the details of a Viewdata operation as it would relate to configuring a modem for Intellivision to be used in such a configuration. I would think that we would want to, as early as practical, configure one of our Intellivisions as the terminal and perhaps relinquish the Prestel terminal at that time.

DPC/lw

21.12.79

AH/IDB/300

1ogica

Dr D P Chandler
Director of Engineering
Mattell Electronics
5150 Rosecrans Ave
Hawthorne
California 90250
USA

Dear Mr Chandler

As promised when we spoke on Tuesday of this week I am
writing to confirm our talks particularly in three areas.

1. The Prestel International market trial

2. The progress of the market trial

3. An invitation to Mattell Electronics to participate in
    the market trial as a user of the general information
    database.

1. <u>The Prestel International market trial</u>

    As you are aware Logica is acting as consultant to the
    British Post Office in organising an international
    market trial of the Prestel viewdata system. During
    the year of the trial we have asked approximately twenty
    prestigious international corporations to participate as
    users of the system. These users will also have the
    facility of being able to have a part of the database
    for their own personal use by renting frames on the
    system and setting up a Private Closed User Group. The
    enclosed Marketing Sheets should update you fully on
    what the Prestel International market trial is all about
    and give you the background to Prestel International.

2. <u>Progress of the Market Trial</u>

    We are bringing together a small number (say 12) of
    information providers and approximately twenty prestigiou
    international organisations as users. To date progress
    has been excellent. The list of invitees is one which
    was drawn up long ago and one which we must adhere to.
    Consequently in the first stages it is not possible to
    invite Mattell Electronics to participate with a Private
    Closed User Group.

During the trial there will be another category of participant: one that merely makes use of the general information database. The database will obviously be quite small in the early days but the intention is that it will grow in size and scope in line with the influence of the participants. It is this latter category of user, that of a General Information (GI) user that we envisage as the role of Mattell Electronics, particularly in the first few months.

3. An Invitation to Mattell Electronics

    Please accept this letter as a formal invitation to Mattell to participate in the trial as a GI user. In extending this invitation we are aware that Mattell will, if they decide to participate, be doing so in order to gain knowledge of, and involvement in progress in the integration of world databases, in home computer systems, home computing etc. etc.

Recommendations

May I please make the following recommendations.

- Please have signed and return the enclosed Letter of Intent signifying your intention to participate in the Prestel International market trial.

- That Mattell request the installation of two TV terminals, one in one of your European sites say in London and one in Los Angeles in order to access the GI database. The cost of these will be approximately £40/£60 per month per terminal and would be subject to a normal TV rental agreement between yourselves and the terminal supplier. If you agree to this suggestion please complete the attached forms giving details in respect of each terminal location. The request for installation enables us to schedule delivery.

- A separate letter is attached giving information relative to a meeting of participants which is due to take place in London on January 22/23 1980. If you agree to participate please arrange to let me have the names and job titles of those attending to enable us to forward the official invitations from the British Post Office. Many senior people from the various participant organisations worldwide will be attending and may I respectfully suggest therefore, that you treat this workshop as an important calendar date. The Tuesday evening dinner/buffet is a particularly important function as it will enable participants to meet in a less formal atmosphere.

In conclusion may I thank you for giving us the opportunity to write to you. We would welcome Mattell as a GI database user of the Prestel International system. I am sure that your

company corporately and you personally, can play a
major role along with the small but prestigious group
of international organisations who are participating
in the trial.

Please be in touch as soon as possible.

Yours sincerely

PP Steve Soldiard

Allan Hewitt

LETTER OF INTENT

TO: LOGICA LIMITED
        64 Newman Street
        London W1

Dear Sir

It is our intention to participate in the market trial of
Prestel International, being organised by Logica Limited
on behalf of the British Post Office.

We recognise that at some future date we will need to enter
into a rental agreement for terminal equipment with a
terminal supplier and also an agreement with the British
Post Office on the services to be offered to us by them.

Until such agreements are signed, this letter will serve
as confirmation of our willingness to be a participant in
the Prestel International service.

For and on behalf of

        ....

        ....

        ....

        ....

TERMINAL INSTALLATION DETAILS

COUNTRY   TOWN   ....

NAME OF USER   ....

LOCATION   ....

CONTACT NAME
AND POSITION   ....

CONTACT TEL.NO   ....

TYPE OF SET   ....

READY FOR
SERVICE DATE   ....

BILLING ADDRESS   ....

e.g. Los Angeles

TERMINAL INSTALLATION DETAILS

COUNTRY   TOWN   ....

NAME OF USER   ....

LOCATION   ....

CONTACT NAME
AND POSITION   ....

CONTACT TEL.NO   ....

TYPE OF SET   ....

READY FOR
SERVICE DATE   ....

BILLING ADDRESS   ....

Dr D P Chandler
Director of Engineering
Mattell Electronics
5150 Rosecrans Ave
Hawthorne
California 90250
USA

logica

PRESTEL INTERNATIONAL

A meeting of all the participants in the Prestel International
Market Trial will take place in London in January 1980. Details
of the meeting are given below.

Objectives

To facilitate an exchange of information between the participants
and to update the participants on the current status of the
market trial, the database, the terminal supply situation, and
activity taking place with the various PTTs within the market
trial countries.

The Date and Venue

Date   Tues/Weds   22/23 January 1980

Time   Tuesday   9.30 am - 5.30 pm

            Wednesday   9.30 am - Lunch

Venue - Waldorf Hotel, Aldwych, London.

The Attendees

We anticipate that at least two people will represent each of the
participants organisations and therefore the meeting will be
made up of approximately 100 people representing the information
providers, the users, the terminal suppliers, syndicated users,
and the British Post Office.

The Agenda

At this stage the agenda for the meeting has not been finalised.
However, it is intended that it will cover the following topics.

- Background to PI

- The Information Providers - the what and the how

- Panel discussion and presentations by selected Information
  Providers

- Development of a Private Closed User Group

- Development of a Syndicated Closed User Group

- Panel discussion and presentations by selected users

- The Terminal Providers

- The PTTs

- The need for User Group(s)

Note

Prestel sets will be available in the hotel for Users and
Information Providers, to give them the opportunity to
privately demonstrate their PCUGs and Information databases
if they so wish.

Accommodation

It is anticipated that several participants attending will
require hotel accommodation on the night of Tuesday 22nd
January and we envisage at least half of the attendees staying
the night. Accommodation will be arranged and the cost of
a single room will be approximately £40 payable by the individual.

Catering Arrangements

Tuesday 22nd January - Lunch

- Evening is Buffet Dinner when it is
  hoped that additional guests may be
  present. It is intended that this
  occasion will give participants an
  informal opportunity to meet and
  exchange views and you are encouraged
  to treat the evening as a very
  important part of the meeting.

Wednesday 23rd January - Buffet Lunch will be served 12.30 pm
onwards and the meeting will disperse.

Please let me know as soon as possible the names of those persons from your organisation who will be attending so that official invitations from the British Post Office can be forwarded. Please also let me know whether or not the attendees from your organisations will require overnight accommodation on Tuesday 22nd January.

Your early response would be appreciated.

Yours sincerely

A Hewitt

PRESTEL INTERNATIONAL MARKET TRIAL

PRESTEL INTERNATIONAL

Information is one of the prime resources of modern business.
Efficient access to relevant and up-to-date information is
becoming increasingly vital to many organisations, particul-
arly to those with international interests. Prestel Internat-
ional has been conceived to meet the information needs of
international organisations and their executives. It will
make a central databank of business information from many
countries available world wide.

The Prestel International service will be based on Prestel
technology, which is essentially a simple but efficient
combination of telephone, television and computer technol-
ogy. Pressing the keys of the Prestel desk top terminal
calls up any of the thousands of information frames avail-
able to be displayed in full colour on the screen. The
information frames are provided by publishers and other
organisations who are experts in providing authoritative
top-quality information to business, government and the
professions. Prestel International can also be used by
individual organisations to disseminate private internal
information to their offices throughout the world, giving
immediate access to the latest available information.

In order to assess the feasibility and viability of a Prestel
International service, the British Post Office is conducting
a market trial to run during 1980. Logica, a leading comm-
unications and computer consultancy, has been commissioned by
the British Post Office to establish the arrangements for the
operation of the market trial.

PRESTEL INTERNATIONAL MARKET TRIAL

THE MARKET TRIAL

A market trial of the Prestel International service will be
conducted throughout 1980 to determine whether such an inter-
national business information service is feasible and viable.
The market trial will be limited in scale, so that efforts
can be concentrated on providing a top-quality service and
so that a proper evaluation can be carried out.

A small number of international organisations, representing
both business and government, are being invited to partici-
pate as users of the trial service. The information in the
databank will be provided by a few invited organisations who
will offer a range of both general and specialist information
relevant to international businesses and professional people.

During the market trial the Prestel International service
will be supported in seven countries:

> Australia
>
> The Federal Republic of Germany
>
> The Netherlands
>
> Sweden
>
> Switzerland
>
> The United Kingdom
>
> The United States of America

The market trial will give users and information providers in
these countries the opportunity to assess the impact that an
international Prestel service will have. The British Post
Office will be monitoring the market trial and are expected
to decide on the future of Prestel International before the
end of the trial period.

PRESTEL INTERNATIONAL MARKET TRIAL

FACILITIES

Users contact Prestel International from a Prestel terminal which is like a small television set equipped with an alphanumeric keyboard. The Prestel terminal is linked to the Prestel International computer via the telephone network. All the user needs to do to access Prestel International is to make a telephone call and to log in.

Once the user is connected to the service, information is easy to find, thanks to the comprehensive indexing system developed by the British Post Office. Information is organised in 'frames', a frame being simply the contents of one screen. There are information frames and indexing frames. The latter direct the user to the information frames in which he is interested. Every indexing frame presents the user with a choice of topics. Next to every topic listed, a number appears on the screen which, when tapped on his keyboard, leads him to the topic area selected. If a user already knows the information frame he wishes to look up, he can key in the appropriate number directly, without needing to go through the indexing frames.

Information frames are attractively displayed on the screen. Information providers who set up the frames take special care to present their information in an unambiguous and helpful style. The use of colour further adds to clarity, as do letters of different sizes, graphics and diagrams.

Information providers can up-date their information at any time from an editing terminal or by bulk up-date from another computer. There are no printing or distribution delays. Thus users always have the latest information available. Overall Prestel International makes disseminating information more efficient for the information provider and obtaining the information faster and easier for the user.

The Prestel International computer can restrict the retrieval of certain information frames to nominated users. This facility, called a Closed User Group (CUG), allows users to disseminate company internal information to overseas subsidiaries and branches. It is also used by providers of specialised information who prefer to supply their information to a restricted number of users on a subscription basis.

Prestel International offers a reply service by making use of special response frames prepared by information providers. Users can type responses using their keyboards. This facility can be used for a variety of purposes such as replying to questionnaires, ordering goods and services, or making reservations. Once completed and sent, the response frames are stored in the computer until recalled by the information provider who owns the frame.

PRESTEL INTERNATIONAL MARKET TRIAL

PUBLIC INFORMATION

Whatever their precise line of business, most organisations
regularly need certain types of information related to their
every day business activities. To fulfil these information
requirements of company executives, their support staff and
some specialist services, Prestel International will offer a
comprehensive public databank. Subject areas in the data-
bank will be especially designed and developed to suit the
finance, marketing, travel, distribution and personnel exe-
cutives and their departments. A large part of the inform-
ation will of course be of interest to all types of user.

Here is a sample of the topic areas intended to be covered
by the public databank and how they relate to the selected
functional areas that exist in most organisations:

Functional Area of Organisation	Topic Area of Databank
Finance	exchange rates, money markets, stock markets, commodity prices, company results, taxation
Marketing	international and national trade statistics, commercial attachés, exhibitions, advertising, research papers
Travel	timetables, fares, hotels and rest- aurants, traveller's cheque rates, traveller's briefing, entertainment and sport directories
Distribution	timetables, journey distances and times, weather and road conditions, customs regulations, directories
Personnel	cost of living statistics, living abroad, data, regulations, confer- ences and courses
General	international news and weather, demonstrations, games and amusements

The information, provided by well known publishers and other
organisations specialising in information provision, will be
regularly updated and comprehensively indexed. Users will
know that at all times they have reliable up-to-date information
literally at their fingertips.

PRESTEL INTERNATIONAL MARKET TRIAL

TERMINAL EQUIPMENT

The Prestel terminal is a small modified colour television
receiver equipped with a keyboard. It is fitted with a
decoder, a micro-processor which communicates with the
Prestel International computer and generates the inform-
ation displays. The use of television technology enables
the display to be created using six primary colours as
well as white, so that information can be attractively and
clearly presented. For example, frames can be created with
coloured background and important details can be highlight-
ed by colour changes or flashing. Double or triple sized
characters can be used for titles. Histograms and diagrams
can be built using the 64 Prestel graphics characters. A
screen will accommodate twenty four lines of fortycharact-
ers.

There are three types of keyboard available. The first is
a simple numeric keypad which, is all that is required for
retrieving information from Prestel International. Most
Prestel International terminals will have an alpha-numeric
keypad which will allow more flexible input to response
frames. Finally there is the editing keyboard, used for
creating frames for the database. In addition to the
standard alpha-numeric keys, it has keys for controlling
colour and character size and keys for creating graphics.
These keyboards are used by information providers and
PCUG owners.

Hard copy printers are becoming available which will enable
the contents of a screen to be transferred to paper for
subsequent reference. These will be an optional extra
which can be plugged into the terminal.

For the Prestel International market trial, Prestel terminals
will be supplied by a recognised television supplier in each
country who will be responsible for their maintainance.
Outside the UK, Prestel terminals will require an external
modem to connect them to the telephone network.

If an organisation is already using terminals compatible with
Prestel International, connection of these terminals to the
Prestel International system may be permitted.

PRESTEL INTERNATIONAL MARKET TRIAL

OPERATIONS

The Prestel International service is provided by the British
Post Office in London on a GEC 4000 series computer. The
service will be available for 22 hours per day, six days per
week. During the close down period, which will be scheduled
for two hours between 0100 - 0500 GMT depending on time zone
differences, the databank will be archived to safeguard
against possible loss of data in the event of a subsequent
system malfunction.

In the Prestel International computer centre, two complete
GEC 4000 series computer configurations are installed for
the market trial. The GEC computer is proven in continuous
process control applications and total system failure will
be very rare. On such occasions the standby computer sys-
tem will be switched on and the service normally restored
in less than thirty minutes.

During the market trial connections with Prestel International
from Europe and Australia will be made via datel telephone
calls directly dialled to the London Computer Centre. Conn-
ections from the United States will be via the RCA Globcom
Low Speed Data Service and thence via the BPO International
Packet Switched Service (IPSS). Data is transmitted from
the Prestel International computer at 1200 bits per second and
control information from user's keyboards transferred back at
75 bits per second using a Start/Stop asynchronous protocol
and an ISO7 compatible character set.

PRESTEL INTERNATIONAL MARKET TRIAL

TERMS AND CONDITIONS

1.   Contracts to participate in the Prestel Inter-
         national market trial will be made under English
         Law between the customer and the British Post
         Office.

2.   The British Post Office will provide the Prestel
         International market trial service.

3.   For the duration of the market trial only, the
         British Post Office will in some cases rebate
         a proportion of the telecommunications cost
         incurred during the Prestel connect time.

4.   The prices quoted do not include UK Value Added
         Tax or any other relevant local taxes. To the
         extent that the services provided are subject
         to these taxes, the prices will be increased
         by the gross amount of these taxes.

5.   Invoices will be submitted every quarter. Where
         appropriate, rebates will be issued with the
         quarterly statement.

6.   In addition to the Prestel International charges
         incurred, the invoice will also include frame
         retrieval charges. These will be collected by
         the British Post Office on behalf of the inform-
         ation providers.

7.   The prices quoted in the attached schedule apply
         only to the Prestel International market trial
         until December 1980 and in no way indicate the
         level of charges that might be levied in any
         subsequent Prestel International service.

PRESTEL INTERNATIONAL MARKET TRIAL

SCHEDULE OF CHARGES

The prices quoted are standardised in Prestel Resource Units (PRU).
Accounts will be invoiced in local currency at an appropriate PRU
exchange rate, set one quarter in advance. One PRU is currently
equivalent to 1p sterling.

Prestel International Market Trial Charges

Entry Fees	Waived
Standing Charges	
Annual service charge	Waived
Rental of CUG	Waived
Rental of database space	25 PRU per frame per quarter
Usage Charges	
Retrieval connect time	10 PRU per minute
Edit connect time	Waived

Telephone Charges

EUROPE - users will be charged full dial-up
international datel telephone rates by their
local telephone authority. A proportion of
these will be rebated to the user through
credits on Prestel International billing.

USA - users in the USA will be charged datel
charges, with a rebate, until the establish-
ment of an IPSS link.

AUSTRALIA - to be announced.

Local telephone authorities may impose an
additional installation charge.

Terminals

The rental costs of retrieval terminals, edit terminals, modems and
hard copy printers are subject to quotation by local suppliers. Current
estimates of the rental costs of retrieval terminals are £40-£60 per month.

Frame Retrieval Charges

Users are charged the price in PRUs of retrieval of each Public Database
frame, which is set by the information provider to reflect the value of
the information.

Taxes

The above do not include local taxes, which will be billed as appropriate.

THIS SCHEDULE OF PRICES APPLIES ONLY TO THE PRESTEL INTERNATIONAL MARKET
TRIAL. IT DOES NOT REFLECT THE PRICE STRUCTURE OR PRICE LEVELS OF ANY
FULL PRESTEL INTERNATIONAL SERVICE THAT MIGHT FOLLOW THE MARKET TRIAL.

PRESTEL INTERNATIONAL MARKET TRIAL

SCHEDULE OF TELECOMMUNICATION TELEPHONE CHARGE REBATES

As part of the Prestel International Market Trial service, a rebate
will be offered on calls to the Prestel International Market Trial
computer. These rebates will be handled via Prestel International
billing and will operate at the following rates per minute:

West Germany	0.40 DM
Netherlands	0.30 G
Sweden	1.20 SK
Switzerland	0.05 SFr
UK	Nil
Australia	~~To be announced~~ 1 Australian Dollar per minute AFTER rebate
USA	$1.00 prior to installation of an IPSS link

Rebates are measured by connect time as measured by the Prestel
International computer and will be reviewed at regular intervals.

January 28, 1980

TO: Ed Krakauer
            Jeff Rochlis
            Al Secor
            Chuck Rudd

FROM: Dave Chandler

SUBJECT: REPORT ON PRESTEL INTERNATIONAL FORUM

The Forum:

Approximately 100 people from 37 companies, in addition to Logica and the British Post Office, attended the Forum. It provided an opportunity for a good interchange among the people and general understanding of where the program is and where it is expected to be going.

Schedule:

The computers for Prestel International are not yet in place but they are expected to be in operation within a few weeks. Terminals suitable for use in the United States are two to three months away and how soon after that we will get ours ·is not clear; probably about a month. It will be a Sony terminal.

Prestel International:

The Prestel International market trial is being handled independently from the U.K. Prestel operation and is also being handled independently from the United States activities, which GTE is handling. This does not necessarily mean that in future operations there might not be more connection between them, or conceivably, they may be incorporated together. However, the problems associated with transfer of software from one country to another are such that linking of the national systems does not seem too likely, for a while at least. The Prestel International market trials are being managed for the British Post Office by Logica.

British Post Office:

I am particularly impressed with the aggressive way in which the British Post Office is pursuing the Prestel concept. Within the United Kingdom they, of course, have the full responsibility for it as a nationalized corporation. In the case of the Prestel International, however, they are operating as a separate competitive company - much as an independent corporation would do. They are investing significant amounts of money which are the result of the profits they have been making on their total British operations, not the Prestel, but the other communications and mail operations. It appears that their mail system is costing them money but their communications system is making them money.

Contacts:

Probably the most important contact I made at the Forum was with Richard Cummings who is the General Manager for International Operations of BARIC Computing Services, Ltd. Among other things, they have programmed a number of games on the U.K. Prestel system, and to the surprise of many people, these games are getting more activity than any of the other software on the system. They impress me as being a capable programming group, who could do effective Intellivision programming for us for the British market. They could be interested in doing programming for us if that meant that they could apply Intellivision to business applications in the U.K. As a next step, I have promised to send Mr. Cummings our Intellivision brochure and the technical description. They probably will contact us to set up a meeting if we are interested in pursuing this.

Prestel Codes - A Slight Problem:

I got from Logica a complete specification of the Prestel Communication Codes. The complete set includes display capabilities which are not reasonable for us to include in our Keyboard Component. Most of these are of little conse- quence in the U.S. market; perhaps of a little more concern for the European market. A few will require some compromises for some software - mostly in areas

that really are not compatible with N.T.S.C. T.V. presentation. Prestel
software can call for any of seven colors as background anywhere in the
presentation portion of the screen, with the alphanumeric or graphic characters
also codable in any of these seven colors. We have the seven colors, all right,
but at the high resolution most of the color combinations are not acceptable on
N.T.S.C. sets. As a result, we have configured Intellivision to write the
characters at a different luminence from the background color, but not a different
color. My present feeling is that we will, under software control, accept the
incoming codes, and we will have to decide whether to pick the color called for
the background color or the color called for the characters, and use that for
the background color for that area. Then the alphanumeric or graphic characters
will be superimposed on that background color as a different luminence color.
This will change the effect, particularly in the graphics areas, from what the
original software intended to have, but it will provide all the shapes of objects
that were intended, and I suspect will provide an acceptable presentation in
almost all - if not all - the cases. I will want to discuss this with GTE and
get their reactions as well. In addition to the building blocks for the crude
graphics that we knew about for the Viewdata systems, it turns out that they
also have a similar set of characters which are made up of spots instead of
blocks. We will have to see if we can get these worked into our character set
without creating other problems.

DPC/lw

Logica Inc.

341 Madison Avenue
8th Floor
New York
NY 10017

telephone (212) 599-0828
telex 238539

Computer software
International communications
Banking systems
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RECEIVED
FEB 27 1981
. CHANDLE*

February 24, 1981

logica

Dr. David P. Chadler
MATTEL ELECTRONICS
5150 Rosecrans Avenue
Hawthorne, CA 90250

Dear Dr. Chadler:

Picture Prestel, the videotex transmission of color photographs, is here and can be seen at the Information Utilities Conference '81 on March 2, 3, and 4 at the New York Hilton. You are cordially invited to come and visit us at booths 31 and 32 and view this latest addition to the Prestel system.

The Picture Prestel technology is expected to enhance the advertising potential for the videotex medium, as well as enabling users to view goods and services before buying.

Prextend, the dynamic display graphics capability of Prestel, will also be demonstrated at the conference.

We hope you will take this opportunity to view these two latest additions to the Prestel technology. We look forward to seeing you at the New York Hilton on March 2, 3 or 4.

Sincerely,

Adrian Noad

Adrian Noad
U.S. Manager
Prestel International

NEWS RELEASE

FOR: PRESTEL INTERNATIONAL

CONTACT: Julie Wang
212/599-6924

FOR RELEASE MARCH 2, 1981

NEW YORK -- Prestel International, the two-way international business information videotex system, that connects a modified TV set with a computerized data base via telephone lines, will be demonstrating its latest technology -- Picture Prestel -- at the Information Utilities Conference in New York this week.

Picture Prestel provides transmission of color photographs to enhance message content, increase the advertising potential of videotex and allow users to view goods and services before buying -- in much the same way that a mail order catalogue is currently used.

Prestel is the name given to the videotex system invented and pioneered by British Telecom, the telecommunications arm of the British Post Office. It is an interactive system, such that at the push of buttons on a keypad linked to a TV set, users can reserve hotel rooms in many countries, order market reports, or request constantly updated news from information providers in participating countries.

A market trial of Prestel International has been underway for the past year in the Netherlands, Switzerland, West Germany, the U.K., Sweden, Australia and the U.S., with 350 terminals on the service. Full service will be available for business subscribers in these countries, plus Hong Kong, within the next few months and will be launched in the U.S. in the Fall.

-more-

"We are actively looking for a company to market Prestel International in the U.S.," says Adrian Noad, U.S. Manager of Prestel International. "The current marketing effort will be directed at specific business users, such as those in the computer, shipping and commodities industries. Later we plan to widen our market."

In Britain, where Prestel has been available for business and residential use since September 1979, there are nearly 9,000 modified television sets registered on the Prestel system. About 80 percent of users are business subscribers, who have access to 200,000 "pages" of information, ranging from the latest commodities prices to travel timetables and computer games.

Each Prestel "page" consists of 24 lines of 40 characters each, or a combination of figures and simple diagrams in up to seven colors. Picture Prestel provides the additional capability of transmitting color photographs on the system.

Currently, the most popular use of Prestel is in the travel industry. This is followed by stock exchange and investment information and news plus classified advertising provided by many regional newspapers. The two-way interactive system allows users to order wine, for example, simply by inserting a credit card number.

Both within Britain and on the Prestel International service, American Express is an active information provider. Subscribers can get up-to-the-minute information on hotels, restaurants, entertainment and airlines around the world and make reservations through the system.

Most American Express "pages" are provided free of charge, because they increase business. Some information providers charge a small fee for access to information. Thus, a viewer would pay for a news update from The Wall Street Journal or an abstract of a recent market research study. The full study could subsequently be ordered through Prestel.

Other active users of the Prestel International service include "closed user groups", usually large companies that can restrict access to the information to company members who have the correct user number, plus a password and personal password, to ensure security. Shell and Unilever each rent space on the Prestel International computer as closed user groups, to keep track of company research and budgeting around the world.

Smaller businesses are expected to use the system to keep up-to-date with international business information that affects them directly. Information will come from data base producers, as well as from financial institutions and publishers. Current information providers to Prestel International in the U.S. include The Wall Street Journal and Merrill Lynch.

Prestel International is expected to provide updated information more cheaply than is currently possible with on-line computers, and more rapidly than printed materials.

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PRESTEL ARRIVES IN THE U.S.A.

You are invited to attend the U.S. launch of the Prestel ®

world videotex service from its Boston-based computer.

    ON: Tuesday, January 19, 1982, 11 a.m.

    AT: The Georgian Room, Mezzanine Floor
           The Boston Park Plaza Hotel
           Park Square at 64 Arlington Street

Guests of honor will include:

His Excellency Edward J. King   Mr. Frank Burgess
Governor of Massachusetts   Managing Director of Prestel
                                     British Telecom

Mr. Philip McKearney
Her Majesty's Consul General, Boston   Mr. William Shrimpton
                                     President
Commissioner Ernest Lucci   BVT
Massachusetts Department of
  Commerce and Development

Plus representatives of U.S. manufacturers of videotex hardware and
software including AVCO, Zenith, Wolfdata, Logica and Radofin

Prestel, the world's leading commercial videotex service, connects a

database of 200,000 pages of computerized information to business and

home users via telephone lines. The Boston computer will give U.S. users

local telephone call access (via Telenet) to the Prestel database and

allow corporations to become operators of their own videotex service

within the U.S.

Come join us for a hands-on demonstration of Prestel and experience its

multiple interactive capabilities.

RSVP   Julie Wang 212/599-6924   -or-   Diane Davis 617/267-4920
        Manning, Selvage & Lee   Diane Davis Associates

® Prestel is the registered trademark of British Telecom.

666 Third Avenue
New York
NY 10017
USA

telephone (212) 599-0828

Mr. David P. Chandler
Mattell Electronics
5150 Rosencrans Avenue
Hawthorne, California 90250

logica

Dear PRESTEL User:

Happy New Year to you! We at Logica Inc. are still
celebrating the new year since 1982 is the start of a new
era for videotex in the U.S. This month marks the official
opening of the first PRESTEL computer on American soil.
Named after Thomas Jefferson, this GEC 4082 minicomputer
will provide a bureau service for U.S. firms wishing to run
their "own" videotex system or maintain private databases.
"Jefferson" will also provide a link making access to the
PRESTEL World Service easier and, in most cases, less
costlier to you.

The PRESTEL World Service database comprises over 200,000
pages of information from international information sources.
I+ includes the PRESTEL UK database and information
integrated from the PRESTEL International Market Trial.

In order to access the PRESTEL World Service via "Jefferson"
dial any one of the following telephone numbers:

        617-657-6474
        617-657-6475
        617-657-6476

When you hear the datatone, depress the data button on your
phone. You will then be prompted for your PRESTEL
passwords. Note that this is a direct dial call to Boston,
Massachusetts.

Mr. David P. Chandler

You may also continue to access the World Service through the RCA Low Speed Data Service and by dialling direct to Great Britain:

011-44-1-600-6421

Should you have trouble in accessing PRESTEL, please notify me at Logica Inc. I can be reached during our regular working hours of 9:00 am to 5:30 pm. At all other times, you may contact the Prestel Operations Center in Great Britain by dialling:

011-44-1-638-6631

Please feel free to contact me if you need more information about your account or about using the Prestel service.

Very truly yours,

Rosemary L. Azzaro
Manager, Customer Services

P.S. Good news for Apple II and Apple II Plus microcomputer users! Floppy disks are available from Logica Inc. to allow you to access PRESTEL with your Apple. See the enclosed "Appletel" Fact Sheet for details!

Enclosure

RECEIVED
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APPLETEL FACT SHEET

1. For Apple owners Logica announces a new way to
    subscribe to PRESTEL avoiding virtually all terminal
    and installation costs. With an Appletel software
    package your Apple II becomes an extremely powerful
    machine, a combination of desktop computer and
    sophisticated PRESTEL receiver. With Appletel, no
    components are involved.

2. PRESTEL$^{(R)}$, the world's leading videotex service, is an
    information system and a communications network for
    business or home users. It operates via the telephone
    line and is simple to use. Information is provided by
    numerous well-known independent organizations who
    contribute to over 200,000 regularly updated pages
    already available. People interested in commodities
    finance, and travel particularly will find the speed
    and accuracy of the database invaluable. PRESTEL is
    interactive so you can send and receive messages via
    the system throughout the U.S. or around the world.
    You can also rent space on PRESTEL computers to
    establish your own confidential database, or private
    videotex system. PRESTEL is a versatile and
    user-friendly technology.

3. Appletel Cost:

   - $85.00 (two discs plus instruction manual)

   PRESTEL User Costs:

   - $50.00 per month per registration
   - $0.30 per minute connect charge
   - $0.15 per minute communications charge (Telenet)

4. The Appletel software package consists of a floppy disc
   (and a spare) plus an instruction manual with details
   of registration and how to use PRESTEL. With the
   package you will be able to:

   - access the entire public PRESTEL database.

   - fully utilize the PRESTEL response and mailbox
     facilities to send and receive messages.

   - automatically dial up and log into PRESTEL.

   - automatically call up, examine, amend, store,
     re-call or delete sequences of PRESTEL information
     you regularly need.

   - store pages on your disc and examine them offline
     at leisure.

   - locally edit Prestel frames offline to annotate or
     comment on the information.

5. Appletel System Features:

   - black and white alphanumeric and graphic character
     display to full PRESTEL standard.

   - storage capacity of 60 frames on each Appletel
     master disc, and 200 frames capacity on each
     Appletel blank disc.

   - storage capacity of 10 sequences of command per
     disc. Each sequence is made up of 46 commands for
     storage and retrieval of PRESTEL pages.

6.   <u>Required Computer Configuration</u>

- Apple II Microcomputer with 48K RAM

- Monitor (RGB Monitor for PRESTEL color display)

- At least one Disc II Drive (2nd drive needed if large frame storage or disc copying required)

- Hayes Micromodem II*

7.   <u>Appletel Add-Ons</u>

- Printers for hard copy. e.g. Paper Tiger or TCM 200 available now.

- Available mid-1982: Appletel Color Card - enabling you to upgrade the system to full color.

- Available mid-1982: A.P.E.S. Appletel Professional Editing System, enabling you to become an information provider on PRESTEL creating, editing and managing your own frames.

Prestel and the Prestel symbol are registered trademarks of British Telecom.

Apple II and Disk II are registered trademarks of Apple Computer Inc.

Appletel is a registered trademark of Owl Computers.

* Indicates trademark of Hayes Microcomputer Products, Inc.

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CONTACT:

Bob Morse or Mona Vogel
Logica/BVT
212/599-0828

Julie Wang
Manning, Selvage & Lee
212/599-6924

FOR RELEASE JUNE 28, 1982

PRESTEL LEADS THE WORLD

AS A COMMERCIAL VIDEOTEX SERVICE

NEW YORK, June 28, 1982 -- With 98 percent of videotex and teletext terminals worldwide operating on Prestel-compatible standards,* Prestel continues to set the pace for video-tex developments, Richard Hooper, Chief Executive, Information Services for British Telecom, announced at Videotex '82 today.

In an update on Prestel worldwide Hooper made the following points:

. Prestel is a commercial service available in the U.S., and more than 20 other countries.

. Prestel has 18,000 users, 150 of them in the U.S. and over 900 information providers -- among them American publishers, advertising agencies and corporations, providing over 220,000 pages of information, and gaining 6 million accesses a month.

. Gateway technology, permitting banking, shopping and other trans-actional services from the home, is operating on Prestel and is being developed in the U.S. for home banking in a joint venture under-taken by British Telecom, Logica and Financial Interstate Services Corporation. In Europe, Gateway will link videotex systems operating in Britain, Holland and West Germany.

-more-

* Results of worldwide census on videotex and teletext activities conducted on April 1, 1982 by CSPI International, 90 Park Avenue, New York, NY 10016.

. 200 Prestel terminals have been installed at the Knoxville World's
Fair to provide visitors with an interactive World's Fair database.

. The travel database on Prestel now includes Skyguide -- a direct link
provided by American Express to airport terminal arrival and departure
scheduling boards; Room Service -- booking capability to city and
airport hotels in the U.S. and worldwide, including the New York Hilton,
Sheraton Center, St. Regis, Grand Hyatt, etc.

. The Prestel shipping database now includes a Lloyd's of London Press
service tracking 22,000 merchant vessels in 800 ports worldwide.
The Lloyd's service is updated three times a week and includes arrival
and departure details on ships, casualty reports, port conditions and
delays and information on freight rates and connections with vessels.

. Over 100 different types of Prestel sets or adaptors are available from
40 suppliers. In the U.S. an $85 "Appletel" floppy disc connects
Apple II users to Prestel; Radofin and Wolfdata are making videotex
adaptors for home television sets, at prices ranging from $250 to $650.
Zenith is making Prestel terminals, and software for TRS-80 terminals
will be available shortly.

. Some 15 companies are now making Prestel-compatible videotex systems.
They include IBM, Rediffusion, Aregon, Modcomp, Computex, ICL and
Systems Design Ltd. Between them, these companies have sold 200 videotex
systems worldwide, working to the Prestel standard.

. Information providers are generating income from their services on
Prestel. The most prominent of these are Viewtel 202, the service
operated by the Birmingham Post & Mail and Intercom Videotex, a
commodities price update service from the London, New York, Chicago and
Far Eastern exchanges.

. Picture Prestel, providing full photographic capability, will be
introduced commercially in 1983.

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TORCH COMPUTER CORPORATION

61 Commerce Way, Woburn, MA 01801. Telephone (617) 935-2575

For Release;
February 8, 1983

TORCH INTRODUCES PRESTEL COMPUTER

Torch Computers Limited, one of Britain's most successful microcomputer manufacturers, has introduced a new terminal for Prestel users in North America. The machine utilises fast down-loading software to dump data to disk quickly and accurately, giving real savings in the costs of call time. The software also allows time-delay operations for information transferral during inexpensive off-peak periods.

A 16-gate mainframe Prestel terminal will come on-line in Boston; the first microcomputer based VIEWDATA system ever installed for private users. Known as FLASHLIGHT, the central machine will use software developed in association with Metrotel to offer bulk update facilities and local VIEWDATA information.

The Prestel system will be built around the unique Torch communicating computer. This full color machine offers interactive electronic mail as well as all the benefits of an advanced microcomputer. The standard machine features two 400K disk drives, dual 8 bit processors, and 96K of RAM. All Torch micros have a built in modem , fully approved by the Federal Communications Commision (FCC) as well as British Telecom in the United Kingdom. The micro is fully compatible with CP/M, giving access to a wide variety of commercially available software. The Torch comes bundled with software including Torchmail, Torchgraph, and Executive Aid, a word processing/database card index/diary package.

A local Prestel type system employing the first ever micro-based VIEWDATA host, will supplement the U.K. Hogarth (Prestel) mainframe at a fraction of the cost of traditional systems. This VIEWDATA host will be located in Boston, MA and will have as many as 100 modems. As an introduction to the service, Torch is offering their communications micro with Prestel software at $3950-- $1000 off list price — to new and existing Prestel customers who order within 90 days of the product launch.

European Office: Abberley House, Great Shelford, Cambridge, England CB2 5LQ Tel: 223-841000
Canadian Office: #207, 7240 Woodbine Avenue, Markham, Ontario, Canada L3R1A4 Tel: (416) 475-8622

Options to the system include hard disk machines of either 10 or 21 megabytes, and the "SuperTorch"- a triple processor machine with a Motorola 68000 chip and an additional 256K of RAM. To reduce the overall cost of multi-user systems, Torch will offer a Prestel modem for Apple, Commodore, Timex/Sinclair and Acorn computers effective April 1, 1983.

Torch Computers Limited is one of the fastest growing microcomputer companies in the world. Based in Cambridge, England, Torch was founded in 1981 and in just 18 months released a dual processor microcomputer and a 68000 based 16 bit machine. The product range includes some 30 other microcomputer products. Torch boasts of being one the youngest companies ever to be included on the U.K. government procurement list.

Torch, a well capitalised and managed entity, almost exclusively employs the top graduates of Cambridge (England) University. Torch has manufacturing facilities in Wales, and international offices in Boston and Toronto. Run by two chartered accountants, Torch is competitive and aggressively looking for rapid growth in the high technology arena.

For Further Information:

Fred Madeira
Torch Computer Corporation
61 Commerce Way
Woburn, MA   01801
      Tel: (617) 935-2575

Bob Gerber
Torch Computers
7240 Woodbine Ave.-#207
Markham, Ontario
   Tel: (416)475-8622

After March 31, 1982 Prestel will be accessible only through the GTE Telenet Public Network, or by direct dial. To utilize Telenet you will be required to become a Telenet subscriber. The costs for this service are:

- $10 per connect hour
- $12 per kilsosegment (a segment contains 64 characters)
- $20 per month for an ID/Password Account

This translates into approximately $.90-$1.10 per minute for communications charges and is in addition to the Prestel charge.

To become a Telenet subscriber you should contact your nearest Telenet office and obtain an application.

After you receive your Telenet ID, refer to the enclosed instruction sheet for the Prestel access Procedure for Telenet.

If you do not intend to continue your Prestel subscription, please notify Mr. Al Pearson at Logica Inc. immediately and we will terminate your subscription at any time you desire. Logica's telephone number is 212-599-0828.

ACCESS TO PRESTEL VIA TELENET

1. Dial the nearest Telenet access number. (See Telenet Public Dial Listing).

2. When your terminal is connected to the Telenet network type two carriage returns (CR).

3. Telenet will give you a port identification number and ask you to identify your terminal type.

   EXAMPLE:

   TELENET
   212 7Y

   TERMINAL =

4. Type your terminal type (D1) followed by a carriage return or carriage return only. The Telenet system will respond with an @ symbol.

5. Type in "ID space" and the identification provided by your GTE Telenet representative upon registration followed by a Carriage Return (CR). The system will then ask for your password.

   EXAMPLE

   PASSWORD =

6. Enter the password provided by your Telenet representative followed by a carriage return. The password will not display on your terminal. The Telenet system will respond with an @ symbol.

7. After Telenet prompts with an @, type C followed by a space and the network address. The following is the network address:

   023411002002000   Hogarth

8. Telenet will respond with a connection message and your terminal will then be connected to the selected Prestel host computer.

9. The logon page of Prestel will then be displayed and the standard user number, password and personal password logon procedure should be followed.

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